

OASL Antibody

Catalog # ASC11792

Specification

OASL Antibody - Product Information

Application WB, IF, ICC, E

Primary Accession
Other Accession
Reactivity

O15646
NP_003724, 11321577
Human, Mouse, Rat

Host Rabbit Clonality Polyclonal Isotype IgG

Calculated MW Predicted: 57 kDa

Observed: 65 kDa KDa

Application Notes OASL antibody can be used for detection of

OASL by Western blot at $1 - 2 \mu g/ml$.

Antibody can also be used for

Immunocytochemistry at 2.5 $\mu g/mL$. For Immunoflorescence start at 20 $\mu g/mL$.

OASL Antibody - Additional Information

Gene ID 8638

Target/Specificity

OASL; OASL antibody is human, mouse and rat reactive.

Reconstitution & Storage

OASL antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

OASL Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

OASL Antibody - Protein Information

Name OASL

Synonyms TRIP14

Function

Does not have 2'-5'-OAS activity, but can bind double- stranded RNA. Displays antiviral activity against encephalomyocarditis virus (EMCV) and hepatitis C virus (HCV) via an alternative antiviral pathway independent of RNase L.

Cellular Location

[Isoform p56]: Nucleus, nucleolus. Cytoplasm.

Tissue Location



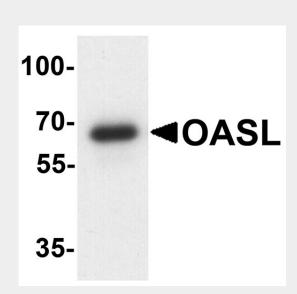
Expressed in most tissues, with the highest levels in primary blood Leukocytes and other hematopoietic system tissues, colon, stomach and to some extent in testis

OASL Antibody - Protocols

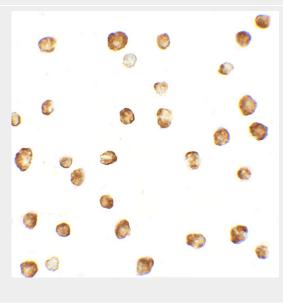
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

OASL Antibody - Images

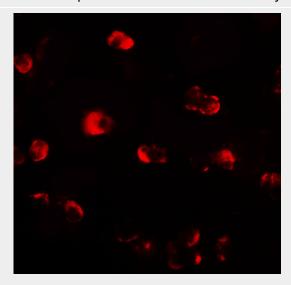


Western blot analysis of OASL in mouse bladder tissue lysate with OASL antibody at $1 \mu g/ml$.





Immunocytochemistry of OASL1 in HepG2 cells with OASL1 antibody at 2.5 µg/mL.



Immunofluorescence of OASL1 in HepG2 cells with OASL1 antibody at 20 µg/mL.

OASL Antibody - Background

OASL (2'-5'-oligoadenylate synthetase-like), also known as p59OASL or TRIP14 (thyroid receptor-interacting protein 14), is a 514 amino acid protein that exists as two alternatively spliced isoforms, designated p56 and p30, and contains two ubiquitin-like domains (1). It is widely expressed in a variety of tissues and interacts with the ligand binding domain of the thyroid receptor (TR) and is able to bind double-stranded RNA and DNA, possibly playing a role in RNA degradation and the overall inhibition of protein synthesis (2-3). Methyl CpG-binding protein 1 (MBD1), which functions as a transcriptional repressor, was identified as a strong p59 OASL interactor (4).

OASL Antibody - References

Rebouillat D, Marie I, and Hovanessian AG. Molecular cloning and characterization of two related and interferon-induced 56 kDa and 30 kDa proteins highly similar to 2'-5' oligoadenylate synthetase. Eur. J. Biochem. 1998; 257:319-30.

Hartmann R, Olsen HS, Widder S, et al. p59OASL, a 2'-5' oligoadenylate synthetase like protein: a novel human gene related to the 2'-5' oligoadenylate synthetase family. Nucleic Acids Res. 1998; 26:4121-8.

Hovnanian A, Rebouillat D, Levy ER, et al. The human 2',5'-oligoadenylate synthetaselike gene (OASL) encoding the interferon-induced 56 kDa protein maps to chromosome 12q24.2 in the proximity of the 2',5'-OAS locus. Genomics 1999; 56:362-3.

Andersen JB, Strandbygård DJ, Hartmann R, et al. Interaction between the 2'-5' oligoadenylate synthetase-like protein p59 OASL and the transcriptional repressor methyl CpG-binding protein 1. Eur. J. Biochem. 2004; 271:628-36.